Environmental Services



Engineering Services

October 19, 2023

Ms. Karen Sherman Town Planner Town of Holliston 703 Washington Street Holliston, MA 01746

Re: Site Plan, Zoning, & Stormwater Design Engineering Peer Review #1 1650 Washington Street, LLC - Proposed 4,518 S.F. Car Wash 1650 Washington Street, Holliston, MA CMG ID 2023-233

Dear Karen,

CMG is providing this letter report detailing our site plan, zoning, and stormwater design engineering peer review relating to the proposed Car Wash Site Plan & Special Permit Application submittal by 1650 Washington Street, LLC (Applicant) dated August 25, 2023. The project Applicant is proposing to construct a 4,518 +/- S.F. Car Wash building with associated parking, access driveways, stormwater management system, Title V septic system, and associated utilities. The project is located on an approximately 48,971 +/- SF (1.12 +/- Acre) parcel identified as 1650 Washington Street in Holliston, MA (the "Site"). Site is located within a Commercial (C-1) Zoning District.

CMG is in receipt of the following documents:

- Application for Grant of Site Plan Review and Special Permit, Applicant 1650 Washington Street, LLC for a "Proposed Car Wash" located at 1650 Washington Street, Holliston, MA, date 8/25/23:
- Form A Application for Endorsement of Plan Believed Not to Require Approval prepared by J2M Consulting Associates, LLC date 8/25/23.
- "Site Plan Set for a Proposed Car Wash, 1650 Washington Street Holliston, MA" prepared by Civil Design Group, LLC date 7/14/23; and
- "Stormwater Management Report for Proposed Car Wash Development" 1650 Washington Street, Holliston, Massachusetts" prepared by Civil Design Group, LLC, date July 2023

CMG is providing this letter summarizing our review comments for the above documents to evaluate the project's compliance with the following regulations for Planning Board consideration:

- o Town of Holliston Zoning By-Laws date May 09, 2022, Amendments approved by the Attorney General's office on September 02, 2022.
- o Town of Holliston Planning Board Rules and Regulations amended through January 5, 2012, revised through May 20, 2021.
- O Town of Holliston Stormwater Management and Land Disturbance Regulations, date May 20, 2021 and the 2008 Massachusetts Stormwater Management Standards.

CMG provides the following technical comments for the Planning Board's consideration:

General Site Plan Comments

- 1. An "Existing Conditions Survey", date 12/30/2022 is listed on the Cover Sheet. However, an existing conditions survey plan stamped by a State of Massachusetts Land Surveyor is not provided.
- 2. Landscape Plan, Lighting Plan, and Architects plans should be listed on the Cover Sheet plan index.
- 3. Guard rail and fencing is required along the top of the proposed retaining wall along with appropriate construction details. Design should accommodate adequate snow storage shelf along the edge of the parking and vacuum spaces.
- 4. Proposed vacuum units appear to be located within 3 FT of the proposed retaining wall. Applicant's engineer should verify vacuum units and retaining wall are constructable per the proposed site plan and addition of guard rail & fencing.
- 5. An ADA parking space with associated striped aisle is proposed along the Washington Street frontage. Pedestrian access to the proposed building appears to be located in the rear. Please verify the accessible route to the building. Details regarding proposed floor plan of the building would also be helpful to delineate any public spaces that are proposed within the building.
- 6. Please verify the number of proposed vehicle stacking spaces associated with the proposed car wash queuing lanes.
- 7. Proposed exit to the car wash tunnel appears to provide an approximately 18' long queue area for vehicles exiting the car wash. CMG recommends this area be expanded to a minimum of 20' long to allow a vehicle to fully exit the car wash and yield to any traffic leaving the proposed vacuum spaces.
- 8. CMG recommends Applicant provide more detail on operations at the car wash tunnel exit and timing of the tunnel wash as there doesn't appear to be adequate room for multiple vehicles stacking if cars are backed up at the Site exit.
- 9. Plans should include a construction detail for the proposed 1:1 rip rap armored slope.
- 10. "Vertical Granite Curbing Detail" shall be revised to include curbing embedded in concrete along front, bottom, and rear faces of the curb.
- 11. CMG recommends Applicant consult with Fire Department to insure there is adequate room for emergency vehicles to enter and exit the Site.
- 12. CMG recommends Applicant provide an SU-30 turning template and/or Autoturn analysis to demonstrate there is adequate maneuvering room for both Site and dumpster access.
- 13. Grading easement metes / bounds and abutter agreement details are not provided.
- 14. Sight distance measurements should be noted on the Site Plan.
- 15. Light post locations should be shown on the Site Plan to match the lighting plan and Engineer should confirm locations along the retaining wall are constructable.

Town of Holliston Zoning By-Law Comments

- 16. Section III D.7 Applicant is listing the proposed car wash use as a General Service Establishment. CMG believes it should also be considered as a "drive-in use" (III.D.8). Both uses are allowed by Special Permit within the C-1 Zoning District.
- 17. Section V-B: No pylon sign and/or ground signage is shown on the Site Plan. All proposed Site signage shall conform to Zoning Section V-B Exterior Signs.
- 18. Section V-C 2.j: Applicant is seeking the Planning Board approval for an alternative parking requirement for the proposed "car wash" use as it is not specifically listed. Applicant is proposing nine (9) proposed on-site parking spaces for the proposed four (4) employees.

- 19. Section V-C 3.a: Parking areas shall be separated from the street and property lines by an area not less than five feet in width maintained with landscaping. Proposed parking spaces along the Washington Street frontage and the proposed vacuum spaces do not have a minimum 5 FT width of landscaping provided. The proposed retaining wall height ranges between 4.0 8.9 FT.
- 20. Section V-C 3.b: Parallel parking spaces 1-5 do not appear to have adequate adjacent driveway width to accommodate one-way vehicle and / or emergency vehicle access.
- 21. Section V-N 4: Proposed development shall not cause any source of sound in a manner that creates a sound level of 10 dBA above ambient measured at the property boundary. CMG recommends the Applicant provide documentation the proposed use complies with this Section.

Holliston Planning Board Special Permit and Site Plan Regulations (Article VII)

- 22. Section 7.3.1 e: "Cover Sheet" shall include the required "Certificate of Action" block.
- 23. Section 7.3.1 k: Location of major trees (12" caliper and over) are to be shown on the appropriate plan sheets.
- 24. Section 7.4.2.C 1: Street Buffer Strip is not provided along Chestnut Street.
- 25. Section 7.4.2.C 5: Retaining walls shall be constructed to a maximum height of six feet. If site conditions require elevation changes of greater than six feet, retaining walls shall be terraced and landscaped. Proposed retaining wall along Chestnut Street appears to be approximately 8.9 feet tall at the highest point.
- 26. Section 7.4.2 E. 8: Finished grades should be limited to no greater than a 3:1 slope. The proposed project's sloped grading areas range between 1:1 ~ 2:1 slopes. CMG recommends the Applicant provide a waiver request and more detail relating to the proposed slope stabilization design, construction methods, and materials for Site slopes equal to or greater than 2:1.
- 27. Section 7.4.2.F.9: Sight distances at the Site's curbcut should be shown on Site Plan Sheet 4.
- 28. Section 7.4.2.E 11: Landscape plan shall be revised to include a note that states, "A minimum of six inches (6") of topsoil shall be placed on all disturbed surfaces which are proposed to be planted.
- 29. Section 7.4.2.H.1: "Utility Plan" Sheet 6 shows a water reclaim system associated with the proposed car wash with no discharge pipe shown. Is the system proposed to recycle 100% of the car wash water? CMG requests the applicant/ engineer include the following information regarding the reclaim system:
 - a. Design/statement from the manufacturer verifying the efficiency of the proposed system.
 - b. Long-term Operation & Maintenance Plan for the reclaim system.
- 30. Section 7.4.2.H.2: CMG Recommends the Applicant provide an estimate of the proposed daily water usage and verify with the water department there will be adequate water flow rate and volume to serve a car wash use.
- 31. Section 7.4.4 Waiver of Standards: The Planning Board in the course of granting a Special Permit may waive any the performance standards where such waiver "is not inconsistent with public health and safety, and where such waiver does not derogate from the purpose of this section". CMG recommends the Applicant provide a detailed waiver list for any performance standards not met by the proposed project for consideration by the Planning Board.

Regulations for Stormwater Management and Land Disturbance (Article XI):

- 32. Section 11.4.4, the Erosion Control Plan (ECP) shall include the following:
 - o. A description of where and how construction vehicles and equipment will be cleaned within the site or at designated entry/ egress stations at the site boundary.

- p. A description of how fueling of vehicles and equipment will be conducted, including how fuels and other vehicle maintenance substances will be stored and handled during construction.
- q. A description of how chemicals and any other materials that constitute a potential source of stormwater contamination will be stored and handled during construction.
- 33. Section 11.10.1.8.a.ii.1: Stormwater report must document treatment BMPs for new developments shall retain 1.0 inch multiplied by the total post-construction impervious surface area in order to meet the TSS and Total Phosphorous (TP) treatment requirements.
- 34. Section 11.11.2.a: The storm events modelled do not appear to use the most current NOAA Atlas 14 precipitation data as stated in The Holliston Planning Board Stormwater Management and Land Disturbance Regulations. The HydroCAD model should be revised to include the current NOAA Atlas 14 reference table 2-year, 10-year, 25-year, 50-year, & 100-year storm event values.

General Stormwater Engineering Design Comments

- 35. Proposed underground infiltration system appears to be located in close proximity to the proposed 1:1 riprap armored slope (located due north). Applicant/ engineer shall include provisions to deter breakout from the proposed Cultec system from leaching out of the proposed slope face.
- 36. The stormwater report references a trench drain. Please verify where the proposed trench drain is located, it does not appear to be shown on the plan.
- 37. Applicant's Engineer shall include a proposed subdrain location on the Site Plan associated with the proposed retaining wall.

MassDEP Stormwater Management Standards Comments

Stormwater Standard 1: No new stormwater conveyances (e.g. outfalls) may discharge untreated stormwater directly to or cause erosion in wetlands or water of the Commonwealth.

38. Rip-rap apron sizing calculations for all pipe surface outlets (FES-1) and rip-rap apron details must be provided for the 100-year design storm event.

Stormwater Standard 2: Stormwater management systems shall be designed so that post development peak discharge rates do not exceed pre-development peak discharge rates.

- 39. The stormwater report documents peak flow rate comparisons for the 2-year, 10-year, and 100-year storm events. Per §11.10.1.5 of the Holliston Planning Board Stormwater Management and Land Disturbance Permits, the stormwater report shall include the analysis of the 25-year and 50-year storm events in addition to the included storm events.
- 40. Rational method design calculations are included in the stormwater report. There are two drainage conveyance pipes which appear to be undersized as the hydraulic grade line (HGL) is slightly above the elevation of the top of pipe:
 - a. 12" HDPE between DMH-1 & DMH-2
 - b. 12" HDPE between DMH-4 & SIS

Stormwater Standard 3: Loss of annual recharge of groundwater shall be eliminated or minimized.

- 41. Recharge volume calculations are included in the submitted stormwater report and appear to be in conformance with Standard 3.
- 42. CMG requests the Applicant include a stage-storage table for the underground infiltration system in order to verify storage capacity of system at the lowest outlet elevation.

Stormwater Standard 4: Stormwater management systems shall be designed to remove 80% of the average annual post construction load of Total Suspended Solids (TSS).

- 43. No Water Quality Volume (WQv) calculations are included in the Stormwater Report. Also see Comment 32 regarding the Town of Holliston TSS & Total Phosphorous (TP) requirements.
- 44. Provide stage-storage-volume tables for the drywell system to verify static storage capacity of Cultec System as necessary to meet the required Town of Holliston WQv = 1 in.

Stormwater Standard 5: Land uses with higher potential pollutant loads (LUHPPL), source control and pollution prevention shall be implemented in accordance with the Massachusetts Stormwater Handbook to eliminate or reduce the discharge of stormwater runoff from such land uses to the maximum extent practicable.

Not Applicable – Site is not a LUHPPL

Stormwater Standard 6: Stormwater discharges within a Zone II or Interim Wellhead Protection Area of a public water supply, and stormwater discharges near or to any other critical area.

Not applicable – Site does not discharge stormwater to or near a critical area.

Stormwater Standard 7: Redevelopment Projects

Not Applicable – Site is not a redevelopment project.

Stormwater Standard 8: Construction period erosion and sedimentation control

- 45. A "Demolition & Erosion Control Plan" is included as part of the plan set. Typical construction details associated with the erosion control measures are included on "Construction Detail Sheet 7". CMG has no exceptions associated with the plan and details as submitted.
- 46. The Site is > 1 Acre therefore an NPDES Stormwater Pollution Prevention Plan (SWPPP) in accordance with the 2022 EPA Construction General Permit (CGP) is required to be submitted prior to construction. CMG recommends the Planning Board require the Applicant to provide the NPDES SWPPP and copy of the EPA ENOI authorization email prior to the commencement of construction.

Stormwater Standard 9: Long term operation and maintenance plan

- 47. A long-term operation and maintenance plan is provided in the submitted Stormwater Report. In accordance with §11.5.2 of the Holliston Planning Board's Stormwater Management and Land Disturbance Regulations, The O & M Plan shall include the following items:
 - 2a. The names and addresses of the person(s) responsible for operation and maintenance.
 - 2b. The person(s) responsible for financing maintenance and emergency repairs.
 - 2d. A list of easements with the purpose and location of each.
 - 2f. Estimated operation and maintenance budget.

Stormwater Standard 10: *Illicit discharges*

48. An illicit discharge statement is provided in the Stormwater Report. CMG recommends the Planning Board require the Illicit Discharge Statement be signed by the owner prior to construction as a condition of approval.

If you have any questions or need additional information, please contact CMG at (774) 241-0901. Sincerely,

CMG

David T. Faist, PE Principal Engineer

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Robert Lussier, EIT Project Engineer II

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